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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,313	01/18/2002	Robert L. Hodges	10004054 -1	8400

7590 02/03/2005  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80627-2400

EXAMINER

LEE, HSIEN MING

ART UNIT	PAPER NUMBER
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2823

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/052,313

Applicant(s)

HODGES ET AL.

Examiner

Hsien-ming Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 7-13 and 19-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 7-13, 19-22 and 24-30 is/are allowed.
- 6) ☒ Claim(s) 23 and 31-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The <sup>corrected</sup> drawing(s) filed on 7/31/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

HSIEN-MING LEE  
PRIMARY EXAMINER

2/6/05

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 11/15/2004 have been fully considered and are persuasive. The 112-second paragraph, 102(e) and 130(a) rejections against claims 7-13, 19-22 and 24-30 have been withdrawn. The rejections against claims 23 and 31-33, however, are still sustained for the reasons as follows.

Although it is noted that claims 23 and 31-33 are a product-by-process claim, product-by-process claims are directed to the product no matter how actually made. *In re Taylor*, 149 USPQ 615, 617 (CCPA 1966). Consequently, it is the patentability of the final product, and not the patentability of the process, that must be determined in a product-by-process claim. *In re Thorpe*, 227 USPQ 964, 966 (CAFC 1985), *Ex parte Edwards* 231 USPQ 981, 983 (BdPatApp&Int 1986).

In this case, claims 23 and 31-33 merely recite "A product formed by .....", wherein the product does not recite any patentably distinct features. Thus, the cited references still read on claims 23 and 31-33.

### ***Allowable Subject Matter***

2. Claims 7-13, 19-22 and 24-30 are allowed.
3. The following is a statement of reasons for the indication of allowable subject matter:

Gardner et al. to US 6,200,862 teach a method of making a semiconductor device comprising:

- depositing a layer of oxide 40 proximate a first surface of a semiconductor substrate 10 (Fig.2C);

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- exposing a portion of the first surface (i.e. top surface) of the semiconductor substrate 10 (Fig.2A);
- forming a gate oxide layer 22 on the exposed portion of the first surface (Fig.2C);
- forming a pair of active areas 28/34 in the exposed portion of the first surface adjacent to the gate oxide layer 22 (Fig.2C);
- forming a gate electrode 24 by depositing a conductive layer (polysilicon, col. 3, lines 57-58) over the gate oxide layer (Fig.2A);
- depositing a dielectric layer 46 (silicon dioxide, col. 4, lines 62-63) over the gate electrode 24, active areas 28/34 and deposited oxide layer 40 (Fig.2C); and
- forming electrical contacts 42/44 to the pair of active areas 28/34 and the gate electrode 24 (Fig.2C).

In contrast, Gardner et al. do not teach or suggest forming a gate oxide layer on the exposed portion of the first surface, adjacent to the deposited oxide layer and forming a pair of active areas in the exposed portion of the first surface adjacent to the deposited oxide layer. Claim 24 recites a sequential order that the layer of oxide to be deposited prior to forming a gate oxide layer and a pair of active areas. In this regard, the layer of oxide 40 in Gardner et al. is deposited *after* forming a gate oxide layer 22 and a pair of active areas 28/34.

Applicant's arguments are persuasive, in particular on page 10, since Bhaskar et al. (US 5,635,968) do not expressly teach or imply the sequential order or the timing of forming the layer of oxide 903. Therefore, the teachings of Bhaskar et al do not read on the claims. Neither does it remedy the deficiency in Gardner et al. US '862.

*Conclusion*

**4. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**5.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hsien-ming Lee whose telephone number is 571-272-1863. The examiner can normally be reached on Tuesday-Thursday (8:00 ~ 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 571-272-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hsien-ming Lee  
Primary Examiner  
Art Unit 2823

Feb. 2, 2005

HSIEN-MING LEE  
PRIMARY EXAMINER

  
